

WHAT IS CLAIMED IS:

1. A communication device for communicating with a remote device by using one of a plurality of paths, comprising:

5 storing means for storing information relating to said plurality of paths;

selecting means for selecting the information relating to one of said plurality of paths stored in said storing means;

10 packet generating means for generating a packet with a header matching the information relating to the path selected by said selecting means; and

transmitting means for transmitting the packet generated by said packet generating means.

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2. The communication device according to claim 1, wherein said selecting means selects, for a unit of connection, the information relating to one of said plurality of paths stored in said storing means.

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3. The communication device according to claim 1, wherein said storing means additionally stores status information indicative of status of the individual paths in a manner associated with the respective paths, and

25 said selecting means selects the information relating to a path by looking up also the status information.

4. The communication device according to claim 3,  
further comprising monitoring means for monitoring the  
status of the paths; and

supply means for supplying said storing means with  
5 the status of the paths obtained by said monitoring means.

5. The communication device according to claim 4,  
wherein the status of the paths indicates whether the  
individual paths are available or not.

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6. The communication device according to claim 4,  
wherein the status of the paths indicates numbers of  
connections using the respective paths.

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7. The communication device according to claim 4,  
further comprising notifying means, responsive to detection  
of a change in the status of a path by said monitoring means,  
for notifying the remote device of the change of the status.

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8. The communication device according to claim 3,  
further comprising receiving means for receiving a packet  
transmitted from the remote device; and

updating means for looking up information included  
in the packet receiving by said receiving means and updating  
25 the information stored in said storing means.

9. A communication method for communicating with

a remote device by using one of a plurality of paths,  
comprising the steps of:

storing information relating to said plurality of  
paths;

5 selecting the information relating to one of said  
plurality of paths stored in said storing step;

generating a packet with a header matching the  
information relating to the path selected in said selecting  
step; and

10 transmitting the packet generated in said packet  
generating step.

10. A computer-readable recording medium  
recording a program for causing a computer to perform a  
15 process of communicating with a remote device by using one  
of a plurality of paths, the program causing the computer to  
function as:

storing means for storing information relating to  
said plurality of paths;

20 selecting means for selecting the information  
relating to one of said plurality of paths stored in the  
storing means;

packet generating means for generating a packet  
with a header matching the information relating to the path  
25 selected by the selecting means; and

transmitting means for transmitting the packet  
generated by the packet generating means.